Application No.: 10/797,606

Art Unit: 1654

Attermed Decket No.: 042100

Art Unit: 1654 Attorney Docket No.: 042190

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) A wound dressing for accelerating epidermal regeneration which comprises:

at least one polypeptide (P) having at least one species of epidermal regeneration-accelerating minimal amino acid sequences (X) selected from the group consisting of Arg Gly-Asp (SEQ ID NO: 1), Ile-Lys-Val-Ala-Val (SEQ ID NO: 2), and Tyr-Ile-Gly-Ser-Arg (SEQ ID NO: 3), and at least one auxiliary amino acid sequence (Y),

a polyalkylenepolyamine and/or polyarylenepolyamine (A) having a weight average molecular weight of 2,000 to 60,000, and

a sheet (S) being polyurethane,

wherein the at least one polypeptide (P) is selected from the group consisting of:

(1) a polypeptide having 13 Arg Gly Asp sequences (SEQ ID NO: 1) and 13 (Gly Ala Gly Ala Gly Ser)₉ sequences ((residues 1-6 of SEQ ID NO: 7)₉) chemically bonded to each other in an alternating fashion,

(2) a polypeptide having 5 Arg Gly Asp sequences (SEQ ID NO: 1) and 5 (Gly Ala Gly Ala Gly Ser)₃ sequences ((residues 1-6 of SEQ ID NO: 7)₃) chemically bonded to each other in an alternating fashion,

(3) a polypeptide having 3 Arg Gly Asp sequences (SEQ ID NO: 1) and 3 (Gly Val Pro Gly Val)₂ Gly Gly (Gly Ala Gly Ala Gly Ser)₃ sequences((residues 1-30 of SEQ ID NO: 49)₉ chemically bonded to each other in an alternating fashion,

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(4) a polypeptide having 13 Ile-Lys-Val-Ala-Val sequences (SEQ ID NO: 2) and 13 (Gly Ala Gly Ala Gly Ser)₉ sequences ((residues 1-6 of SEQ ID NO: 7)₉) chemically bonded to each other in an alternating fashion,

(5) a polypeptide having 5 Ile-Lys-Val-Ala-Val sequences (SEQ ID NO: 2) and 5 (Gly Ala Gly Ala Gly Ser)₃ sequences ((residues 1-6 of SEQ ID NO: 7)₃) chemically bonded to each other in an alternating fashion,

(6) a polypeptide having 3 Ile-Lys-Val-Ala-Val sequences (SEQ ID NO: 2) and 3 (Gly Val Pro Gly Val)₂ Gly Gly (Gly Ala Gly Ala Gly Ser)₃ sequences((residues 1-30 of SEQ ID NO: 49)₉ chemically bonded to each other in an alternating fashion,

(7) a polypeptide having 13 Tyr-Ile-Gly-Ser-Arg sequences (SEQ ID NO: 3) and 13 (Gly Ala Gly Ala Gly Ser)₉ sequences ((residues 1-6 of SEQ ID NO: 7)₉) chemically bonded to each other in an alternating fashion,

(8) a polypeptide having 5 Tyr-Ile-Gly-Ser-Arg sequences (SEQ ID NO: 3) and 5 (Gly Ala Gly Ala Gly Ser)₃ sequences ((residues 1-6 of SEQ ID NO: 7)₃) chemically bonded to each other in an alternating fashion, and

(9) a polypeptide having 3 Tyr-Ile-Gly-Ser-Arg sequences (SEQ ID NO: 3) and 3 (Gly Val Pro Gly Val)₂ Gly Gly (Gly Ala Gly Ala Gly Ser)₃ sequences((residues 1-30 of SEQ ID NO: 49)₉ chemically bonded to each other in an alternating fashion,

wherein the <u>at least one</u> polypeptide (P) and the sheet (S) are bonded by a covalent bonding, and

wherein said auxiliary amino acid sequence (Y) is selected from the group consisting of:

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(Gly Ala)_a ((residues 1-2 of SEQ ID NO: 4)_a), (Gly Ala Gly Ala Gly Ser) ((residues 1-6 of SEQ ID NO: 7), (Gly Ala Gly Ala Gly Tyr)_e ((residues 1-6 of SEQ ID NO: 10)_e), (Gly Ala Gly Val Gly Tyr)_d ((residues 1-6 of SEO ID NO: 13)_d), (Gly Ala Gly Tyr Gly Val) ((residues 1-6 of SEQ ID NO: 16)). {Asp Gly Gly (Ala)_f Gly Gly Ala}_g ((residues 1-12 of SEQ ID NO: 19)_e); (Gly Val Pro Gly Val)_h ((residues 1-5 of SEQ ID NO: 22)_h), (Gly); ((residue 1 of SEQ ID NO: 25);), (Ala);, ((residue 1 of SEQ ID NO: 28);), (Gly Gly Ala)_k ((residues 1-3 of SEQ ID NO: 31)_k), (Gly Val Gly Val Pro)_m ((residues 1-5 of SEQ ID NO: 34)_m), (Gly Pro Pro)_n ((residues 1-3 of SEQ ID NO: 37)_n), (Gly Ala Gln Gly Pro Ala Gly Pro Gly)_e ((residues 1-9 of SEQ ID NO: 40)_e), (Gly Ala Pro Gly Ala Pro Gly Ser Gln Gly Ala Pro Gly Leu Gln)_e ((residues 1-15 of SEQ ID NO: 43), and

(Gly Ala Pro Gly Thr Pro Gly Pro Gln Gly Leu Pro Gly Ser Pro)_q ((residues 1-15 of SEQ ID NO: 46)_q),

wherein a is an integer from 5 to 100; b, c, d, and e each are an integer from 2 to 33; f is an integer from 1 to 194; g is an integer from 1 to {200/(6+f)} with any fraction omitted; h is an integer from 2 to 40; i and j each are an integer from 10 to 200; k is an

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integer from 3 to 66; m is an integer from 2 to 40; n is an integer from 3 to 66; o is an

integer from 1 to 22; and p and q each are an integer from 1 to 13.

2-6. (Cancelled)

7. (Original) The wound dressing according to Claim 1

wherein the polyalkylenepolyamine and/or polyarylenepolyamine (A) is a polyethyleneimine.

8. (Withdrawn) A method for epidermal regeneration treatment which comprises using the

wound dressing according to Claim 1.

9-13. (Cancelled)

14. (Currently Amended) The wound dressing according to claim 1 [[13]], wherein the at least

one polypeptide (P) is selected from the group consisting of ProNectin F and ProNectin L

the polypeptide having 13 Arg Gly Asp sequences (SEQ ID NO: 1) and 13 (Gly

Ala Gly Ala Gly Ser)₉ sequences ((residues 1-6 of SEQ ID NO: 7)₉) chemically bonded

to each other in an alternating fashion, and

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the polypeptide having 13 Ile-Lys-Val-Ala-Val sequences (SEQ ID NO: 2) and 13 (Gly Ala Gly Ala Gly Ser)₉ sequences ((residues 1-6 of SEQ ID NO: 7)₉) chemically bonded to each other in an alternating fashion.